

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION MO/2022)**

CLASS: MBA  
BRANCH: MBA

SEMESTER: III  
SESSION: MO/22

**SUBJECT: MT505 INVESTMENT AND PORTFOLIO MANAGEMENT**

TIME: 03 Hours

FULL MARKS: 50

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates

- Q.1(a) State and explain the objectives of investment activities. (CO-1, BT-2) [5]  
Q.1(b) Discuss the investment avenues available for risk averse investors. (CO-1, BT-2) [5]

- Q.2(a) As an investor how would you minimize various risk exposure? (CO-2, BT-4) [5]  
Q.2(b) Monthly return data (in percent) for IOCL stock and the NSE index for a 12-month period are presented as follows: (CO-2, BT-3) [5]

Month	IOCL	NSE Index	Month	IOCL	NSE Index
1	10.27	11.0	7	2.78	3.74
2	9.31	3.69	8	3.84	2.63
3	6.73	4.20	9	-6.51	-2.10
4	-5.68	-4.93	10	-23.42	-21.35
5	2.60	3.05	11	0.00	-4.55
6	2.86	5.88	12	6.64	2.80

Calculate the beta of a stock. (CO-2, BT- 3)

- Q.3(a) Analyze the impact of following economic variables on the performance of the economy and the companies: [5]  
     (i) Interest rate  
     (ii) Infrastructure  
     (iii) Economic and Political stability. (CO-3, BT- 4)
- Q.3(b) Can stock prices have a support level and resistance level? If so explain. (CO-3, BT-2) [5]
- Q.4(a) Anil has bought a stock that has paid Rs. 3 dividend per share during the last year. He anticipates two situations either a 5% decline in the dividend or 5% growth in the dividend in the next year. His anticipated return is 20% . calculate the price for both the situation. (CO-4, BT- 3) [5]
- Q.4(b) Explain the interest rate risk of a bond? illustrate how the risk arises? (CO-4, BT- 3) [5]
- Q.5(a) Explain the concept of efficient frontier in the context of portfolio selection. (CO-5, BT-2) [5]
- Q.5(b) The following data are available to you as a portfolio manager: [5]

Security	Estimated return(%)	Beta	Std. Deviation
1	32	2.10	50
2	30	1.80	35
3	25	1.65	42
4	20	1.30	26
5	18	1.15	29
6	15	0.85	18
7	14	0.75	20
8	12	0.50	17
Market Index	16	1.00	25
Govt. Security	7.5	0	0

- (a) In terms of security market line, which of the securities listed above are undervalued?  
 (b) Assuming that a portfolio is constructed investing equal proportion of funds in each of the above securities, what is the expected return and risk of such a portfolio. (CO-5, BT- 3)